

# THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

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**American Farmer Establishment.**

BALTIMORE: TUESDAY, AUGUST 16, 1836.

To a Correspondent.—The suggestions of "One of his subscribers," shall be promptly attended to.

**The Drought.**—We see by our exchange papers that the corn crop in some parts of the Eastern Shore is suffering for the want of rain; and this is to be the more regretted as from the failure of the wheat crop, any important diminution in that of corn will be severely felt not only by the public spirited citizens of that peninsula, but by a large district of country whose supplies of this excellent grain are drawn from there.

A letter from an esteemed correspondent dated Carlisle, Pa., August 5, says:

"The wheat, Rye and Oats harvests are over in this county—the wheat and rye crops are exceedingly light, but the oats crop is abundant beyond precedent—the hay has been well got in, and the corn, buckwheat, and potatoes, were never more promising.

**Dutton Corn.**—A respected correspondent of Goochland County, Va., in speaking of a small experiment that he had made with this corn, says:

"It is the earliest variety I have ever seen. It is now dry."

## LIME AND ITS USES.

A correspondent whose letter bears the post mark of Leesburg, Va. and who signs himself "A Subscriber and Reader," asks us the following questions:

1. What quantity of lime should be spread upon an acre of ground now in clover-ley, and intended to be sown in wheat?

2. What are the offices performed by the lime?

3. What number of years will it act advantageously upon ground on which it may be placed?

4. What kind of soils does it suit best, and when can it be most serviceably employed?

5. What quantity of lime should be put upon an acre?

To these queries we answer:

1. The 1st and 5th questions are so nearly twins, if we may so express ourself, that the answer to the one must suffice for both. With regard to the quantity of lime which can be used to advantage on an acre of ground there is great diversity of opinion, and, indeed, it is almost impossible to prescribe any rule which would be entitled to be universally observed. Authors differ upon this subject as upon every other, some fixing the minimum at 25 bushels per acre; while others carry their maximum to 500 bushels. Such wide difference of opinion, among those who should be presumed to understand the force of their recommendations, is at least disheartening to those who look at the subject with a superficial eye; but to those who have given themselves the trouble to *examine* and *think* upon the subject, it must but serve to confirm their belief in the justness of the opinion, now mostly entertained among enlightened men, that lime of itself is a *stimulant*, and not a manure—that its specific action consists in converting all woody and vegetable matter, with which it comes in contact, into nutriment, by promoting its decomposition. If this be true, and we believe it is, it follows as a natural consequence, that the specific service performed by lime is *limited* by the quantity of matter upon which it may be required to act, and therefore, that the *quantity* to be used per acre, must be regulated accordingly. If a field with a fine body of clover upon it be ploughed up, a hundred bushels of lime could with decided profit be used to the acre. We say so, not under the belief that the entire stimulative properties of the lime would be *requisite* to convert such body of vegetable matter into food for the immediate succeeding plants; for our belief is, that it will continue to exert annually a portion of its meliorating powers; because we are of opinion that after it shall have promoted the decomposition of the clover-ley, that its *superabundant* quantity will serve for many

years, both as a decomposer of vegetable substances, and as an attractor of moisture from the atmosphere, and that in this way a most beneficial influence will continue to be exerted on the growing plants for an almost unlimited period of time. It will be thus evident, according to our view of the operation of this mineral, that it acts in a double capacity, viz: *stimulative* and *attractive*: and that for all *present* purposes of promoting vegetation, a greater quantity of the mineral than is necessary to effectuate these purposes is unnecessary for the time being. To ascertain the *precise point* at which the efficacy of the mineral is beneficially exerted, is a matter of great difficulty; but here the *experience* of the farmer comes into his aid, and he is thereby enabled to proceed without danger of applying it in excess of quantity. In England, where its virtues were known, and its advantages experienced long before it was introduced into use in American husbandry, from 50 to 640 bushels have been put upon an acre without any injury—on the contrary, indeed, with decided benefit. The latter quantity we suspect to be very far above what is indispensably necessary; and from the circumstance of the former one exerting a happy influence upon the succeeding crops, we think it, besides being less expensive, the more judicious quantity. At all events, we would not recommend the application of more than 100 bushels to the acre, upon the *stiffest soil*, because we believe it amply sufficient for all the purposes of promoting healthful vegetation; and where the soil is a *sandy loam*, or gravelly loam, half that quantity in our opinion will answer.

2. Its offices consist in promoting the immediate decomposition of all vegetable substances which may be in or upon the ground—in attracting moisture—and by its antiseptic qualities, it neutralises all noxious vapours which may surround it. In this way it greatly contributes to the promotion of the health of a place. While it gives tenacity to thin sands, it opens and renders friable clayey soils, thus rendering both better adapted to the purposes of the husbandman.

3. With respect to the number of years lime will act advantageously upon land, we would remark, that when once limed, with proper care in pursuing a rotation of crops, and the occasional

ploughing in of a clover-ley, a crop of buckwheat, a grass-sward, or dressings of long manure, it will last for an almost indefinite period; but the duration of its usefulness will mainly depend upon giving it matter to act upon.

4. From the preceding remarks it will appear obvious, that it is equally well adapted to all kinds of soils, with the exception of bogs and marishes, and these, before they can be made to derive any benefit from this mineral, must be well drained, and deprived of the water which they may contain.

Having answered the queries of our correspondent, we will make a few additional remarks, illustrative of our views with respect to the mode of applying it. In all cases it should be applied to soil upon which there is a good vegetable covering; and this is the more obvious from the circumstance of its specific action being that of converting other materials into vegetable nutriment. Hence it follows as a matter of course, that the greater the vegetable body which may be upon the land, the more lime may be safely used.

We deem it proper to observe, that where clover-leys may be turned in with a view of sowing wheat, after the ground is ploughed, it should be permitted to remain for at least two weeks before the grain be sown, so as to let it undergo the more violent fermentation which is immediately consequent thereupon; and in spreading the lime, care should be taken to do it as evenly as possible, in order that its benefits may be as uniformly diffused as possible.

Those who wish to see this subject treated at large, we respectfully refer to the very able memoir from the pen of that eminent French chemist, M. Puvion, published in this work last year—But to those who may wish to see it compressed into a small compass, we would respectfully recommend the following brief though satisfactory article:—

**"Lime.**—By the fermentation it induces, the earth is opened and divided; and by its absorbent and alkaline qualities, it unites the oily watery parts of the soil. It seems also to possess the property of collecting the acid of the air, and of forming with it a combination of great use in vegetation. Thus robbing the soil of its oily particles, it will in time render it barren, unless supported with manures of an oily nature. Its great use upon a sandy soil is, by mechanically binding the loose particles, and thereby preventing the liquid parts of the manure from escaping out of the reach of the radical fibres of the plants. Upon clay the effect is different: for by means of the gentle fermentation it induces, the unsubdued soil is opened and divided; the manures laid on regularly, so as to come in contact with every part of it, and the fibres of the plants have full liberty to spread themselves. Although we can-

not describe all the soils that lime operates beneficially upon, we can specify some upon which it does operate well. 1. Upon all soils, being drained, which contains an abundance of ligneous or woody matter, as reclaimed swamps, and upon those containing insoluble vegetable matter, i. e. matters which will not dissolve in water; by reason of their chemical combination, quick lime will be beneficial by rendering the inert matter soluble, and fitting it to become the food of plants. 2. Upon all soils deficient in calcareous, or carbonate of lime, be they even stiff clays or porous sands, mild lime, or lime that has become saturated with carbonic acid, is unquestionably beneficial. It corrects the mechanical defects of clays and sands—renders manures more beneficial, and the drafts less prejudicial. Quick lime soon becomes mild lime after it is commingled with the soil. As a general rule, carbonate of lime is beneficial upon all soils belonging to the primitive formation, and to transition formations that are deficient in this earth. In the use of this mineral, we see the importance of knowing the constituents of soils."

#### BET SUGAR.

The following facts relating to Beet Sugar are extracted from a late French publication:

The manufacturer buys his Beets of the farmer at 16 francs for 1000 kilogrammes. A kilogramme is 2 1-5 lbs. avoirdupois; 100 kilogrammes weigh 2,200 lbs. avoirdupois.

Beets, by accurate analysis, contain ten per cent. of saccharine matter. The manufacturer obtains 6 per cent. of good brown sugar—he lives in expectancy, by future improvements, of 8 per cent. or more. 1000 kilogrammes produce him 1-6th, or 60 kilogrammes of marketable brown sugar, equal to 132 lbs. avoirdupois. The manufacture of 1000 kilogrammes costs 12 francs, from which deduct 3, being the value of the residue as food for cattle. Hence 132 lbs. of saleable sugar can be obtained by the manufacturer at the expense of 25 francs. A franc may be considered as 20 cts. and as there are 20 sous in a franc, a sous is one cent, or one half-penny sterling. The French writers say that it costs 5 sous per French pound; which Kelly in his Cambist states at 7717 grains. This calculation brings the cost of marketable brown sugar to 4½ cents per lb. avoirdupois.

The beets in this country, particularly the north part of Pennsylvania, are most luxuriant. In France they yield per arpent, which is 1-10th more than our acre, an average of 15 tons per acre at most. The white or Silesian Beet ("Beta Alba")—the sugar Beet of France—has been raised within 7 miles of Philadelphia, and produced much over this. Wm. Audenried, Esq. of Schuylkill county, Pa., has raised on his farm, of this beet, the enormous quantity of sixty-two and a half tons to the acre. We are assured by others who are growing the seed which has been imported and distributed so extensively throughout the country by the "Beet Sugar Society," that they are in expectancy of producing a yield equal to the above.—*National Gazette*.

**The Crops.**—Our farmers have just finished harvesting their oats crops, which have yielded abundantly; and the corn fields generally are very promising, which we think, will greatly

alleviate the expected pressure to be occasioned by the shortness of the wheat crops in this neighbourhood. Thus the saying is verified, that the farmer's business though subject to more casualties than almost any other, is yet so divided among many risks, that he is rarely exposed to the hazard of total failure; the same weather which often injures one crop improves another.

We shall soon have ripe peaches in great profusion; the trees generally are so full, that almost every limb requires a prop to prevent its breaking.—*Salem, N. C. Chronicle*.

Extract of a letter, dated

"TENSAN, (Ala.) July 12, 1894.

"Owing to the abundance of wet weather, it is the generally received opinion that there will not be more than half crops of Corn or Cotton made throughout the state. Many of the planters on the river are now planting Corn, having lost two plantings in succession by freshets. The Worms have also taken to the corn, which makes it very doubtful whether they will make anything like bread enough for their families. Cotton and Corn must evidently be very high the present year. I have heard that five dollars per bushel for Corn has already been offered in the town of Montgomery, (the Corn growing part of the country,)—the truth of this however I do not vouch for; it is bad enough, but I trust not so bad as that."—*Balt. Pat*.

**NOVEL IMPORTATION.**—Five large African male asses of a nearly milk white color, were on Saturday landed from the brig *Commauld*, which arrived here on Friday from Gibraltar. These animals are altogether unlike in appearance to the English ass or donkey, one of which may occasionally be seen here, and which is a diminutive little animal, and of very little use as a beast of burden. The African ass is on the contrary as large as a middle sized horse, and has been, as far back as the days of Scripture, an animal much prized for its useful qualities in Asia and Africa.—*Journal of Commerce*.

**PLUMB TREES.**—The rough, black excrescences that appear on the branches of plumb trees, or rather the insects which cause these excrescences, have discouraged the cultivation of plumb in Vermont, more than any thing else. The insects leave the diseased branches in July. Cut them off and burn them before July commences, year after year, and the disease will soon cease to trouble you; especially if your neighbors will adopt the same plan.—*Vermont Chronicle*.

**Cocoons & Raw Silk** will be purchased to any extent by the Northampton Silk company. They have contracted with Dr. Stebbins for a number of bales of raw material consigned to him by an importing house in Boston, and are ready to purchase all raw Silk which may be offered. These facts should convince people of the earnestness of the business, and that our own folks should raise trees and feed worms, rather than compel our Silk Manufacturers to send abroad for the raw materials. In a few days we hope to have some specimens of Silk for exhibition, from the looms of the Northampton Silk Company.



[From Chaptal's Agricultural Chemistry.]

ON THE CULTIVATION OF THE BEET ROOT, AND  
THE EXTRACTION OF SUGAR FROM IT.

(Continued.)

ON THE BEST METHOD OF KEEPING BEET  
ROOTS.

Beets are affected both by cold and heat: they freeze at a temperature one degree below the freezing point of water, and they germinate with a degree of heat but little above freezing: freezing softens them and destroys their saccharine principle, and they decay as soon as they are thawed. Heat develops the stalks of the necks of the roots, and decomposes the juices which supply their growth. During the first stages of germination, the alteration of the juices is only local, so that if the neck of the root be cut off, the remainder of it may be made use of without any inconvenience. In order to keep beets, it is necessary to preserve them both from heat and cold.

The first care of the farmer must be, to have his beets thoroughly dry before being housed. The best way is to leave them in the fields till all their dampness have evaporated. When, however, a large harvest is to be gathered in autumn, a sufficient number of fine days can hardly be hoped for, and the roots must therefore be stored for the winter in such a manner as will be most likely to prevent decomposition.

I have an immense barn, where I pile up my beets to the height of seven or eight feet. I make use of no other precaution than that of forming round the surrounding walls a layer of straw or broom, which rises as high as the pile of roots; when the frosts set in, I cover the pile over with straw; and in this way I have for ten years preserved my crops of beets uninjured by them. It has however happened two or three times, that the roots began to germinate with so much energy, that I was fearful they would become decomposed. In these cases, I unstacked and spread the beets, and thus arrested the process of the vegetation.

Some farmers leave their beets in the fields. In order to preserve them they dig a trench in a dry soil, giving the bottom a gentle slope, that water may flow off easily. This trench they fill with the roots, and cover it over with a bed of earth a foot thick; upon this they throw heath or broom, to prevent the rain from penetrating. Some line the bottom and sides of the trench with straw or heath.

Instead of being put into trenches, the digging of which is always expensive, the beets may be preserved in the fields by forming heaps of them upon a dry soil, and covering the tops and the sides with layers of earth; or they may be covered over with a roof like the one heretofore described. This method of preserving roots may be employed when there is no suitable storehouse for them; or when the means of conveying them to one in autumn are wanting.

## ON THE EXTRACTION OF SUGAR FROM BEETS.

I shall not here describe the numerous difficulties that have been encountered before arriving at sure methods and certain results. I shall confine myself to the description of the simplest

and most advantageous processes that are employed at this time; and I will draw my examples from my own practice, enlightened as it is by twelve years of experiment and observation, I have successfully executed all the known processes; and I have tried all the improvements that have been suggested: I have myself regulated and improved some of the processes; and I shall describe only such as I have proved and confirmed.

## ON THE PREPARATION OF THE ROOTS.

Before subjecting the beets to the teeth of the rasp, they must be carefully freed from the fields. The necks, and any portion that has begun to decay, must be cut off, and the radicles removed from the surface.

In many manufactories, nothing more is done to the roots than to wash them. But this operation cannot be conveniently practised in all places, and I have therefore dispensed with it as a preliminary; nor have I found any bad effect to arise from the omission of it. Eight women can easily prepare 10,000 lbs. of the roots in a day. If the beets are large and retain but little earth about them, the same number of women can prepare in the same time from 15 to 20,000 pounds.

## ON THE METHOD OF RASPING THE BEET ROOT.

The beets, when well cleansed, are submitted to the action of a rasp, by which their fibrous substance is reduced to a pulp. The rasp is worked either by a horse, or by a stream of water. The rapidity of its motion should be equal to four hundred revolutions upon its axis in a minute.

The rasps used by me, are sheet-iron cylinders, 15 inches in length, and 24 in diameter, having their surfaces furnished with 90 iron plates armed with saw teeth and fixed by screws perpendicularly to the axis of the cylinder and throughout the whole length of it.

The beets being pressed against the rasp, by means of a piece of wood held in the hand, are immediately torn in pieces. The pulp falls into a box lined with lead, which is placed beneath. The table upon which the beets destined to the rasp are placed, is so near the instrument as to allow only sufficient space between for the passage of the pulp.

The operation of rasping must be conducted expeditiously, otherwise the pulp begins to turn brown, fermentation takes place, and the extraction of the sugar is rendered difficult. By the use of two rasps, put in motion by the same horse, I have reduced 5000 pounds of beets to a pulp in two hours. The pulp should not contain any portions of roots that have not been acted upon by the instrument.

Compression will not in any degree supply the place of rasping. The strongest presses can never extract from beets more than from 40-100 to 50-100 of their juice, whilst the pulp, if properly managed, will yield from 75-100 to 80-100.

## ON THE EXTRACTION OF THE JUICE.

As fast as the pulp falls into the box placed under the rasps, it is put into small bags made of very strong cloth woven of pack thread.—These bags are placed upon the plate of a good

iron screw press and submitted to a strong pressure. The screws are after a time to be loosened, the places of the sack changed, the pulp which they contain shaken over, and the whole again submitted to the action of the screw.

Sometimes the pulp is first acted upon by a cylindrical press, by which about 60-100 of its juice is extracted, and the operation is afterwards completed by means of the screw press. But 10,000 pounds of beets may be pressed in a day by the last alone.

The pressure should be continued till the pulp will not moisten the hand when strongly squeezed in it. The juice which flows from the press, is carried by leaden pipes into the boiler, where it undergoes the first operation. Of this I shall speak immediately.

If an iron screw press is not to be had, a wine press, a lever press, or a cylinder press will answer the purpose.

The operation of the press should be completed nearly at the same time with that of the rasp. Every thing that has been moistened with the juice, must then be washed so as to be ready for a new operation. The utmost cleanliness must be preserved, otherwise the rasps will become rusty, the juice will change, and the boiling will be rendered difficult.

The juice extracted from beets, is not always of the same degree of concentration. It varies from 5 to 10, (=specific gravity of 1.056 to 1.065) according to the size of the roots, the nature of the soil in which they grew, and the state of atmosphere during vegetation.

The juice of the large roots is less concentrated than that of the small ones. The juice of such as grow in a light soil, and have been exposed to heat and drought, marks 11, (=specific gravity of 1.083;) but there is but little of it.—The greater the specific gravity of the juice is, the greater is the proportion of sugar contained in it; and, of course, the greater is the saving of labor in the extraction of the sugar.

## ON THE PURIFICATION OF THE JUICE.

As soon as the boiler which receives the juice is one-third full, the fire is kindled; and as the juice continues to flow, the heat is raised to 66 degrees of Reaumur, (=180 3-4 deg. of Fahrenheit.) I have worked 10,000 pounds of beet roots per day, at two operations of 5,000 pounds each. The first began at 4 o'clock, A. M., and the other at noon. The round boiler, which received the juice of one operation, was five feet and six inches in diameter, and three feet eight inches in depth. I had a separate boiler for each operation, and each boiler had two stop-cocks, one close to the bottom and the other five inches above. Between these two boilers, there were two vessels fifteen inches deep, and each of sufficient capacity to receive the juice of an operation. In these, evaporation is carried on. The rims of all the boilers should be very wide, so as to cover the thickness of the wall in which they are set.

My rasps and presses are placed upon the first floor, in order that the juice may flow through leaden pipes into the boilers, which are upon the ground floor, and thus save the labor of transportation. By this arrangement, I can have my depuratory boilers so much raised, that upon tur-

ning the stop cock, the juice will flow into the evaporating vessels.

Whilst the juice is heating, some milk of lime is prepared by pouring gradually some warm water into a bucket containing ten pounds of lime. My boiler contains 475½ gallons of juice, so that I employ the lime in the proportion of about 46 grains troy.

As soon as all the juice has passed into the boiler and become heated to the degree mentioned in the last paragraph, the milk of the lime is thrown into it, the greater care being taken to stir and mix them well together; after which the temperature may be raised to the boiling point. As soon as the first bubble makes its appearance through the thick glutinous scum which rises upon the top of the liquor, the fire is immediately extinguished by throwing a pailful of water into the fire place. The scum thickens, dries, and hardens by rest. The juice becomes clear, and takes a light yellow hue. When there can no longer be seen in it particles either of lime or mucilage, the scum is removed with a skimmer and thrown into the bucket, in order that the juice which it contains may be expressed. The upper stop-cock is then opened, and the liquor is suffered to flow into the evaporating boiler.

The juice does not become clear in less than an hour, and evaporation ought not to be commenced till it is perfectly limpid.

As soon as all the liquor above the level of the upper stop cock has passed out, the second stop-cock is turned; and if the liquor flowing through that be found clear, it is mixed with the first portion. If on the contrary, it appears cloudy the stop cock is again closed to give it time to settle, and it is not made use of till towards the termination of the evaporation.

The deposit which was formed at the bottom of the boiler, renders the last portion of the juice turbid. But as soon as this is seen to be the case, that which remains is drawn off into the bucket containing the scum.

The deposit which is formed at the bottom of the boiler, and this scum, are expressed by means of a lever press of very simple and cheap construction, and which is very easily worked.

I place a cylindrical willow basket upon a block of stone three feet square, the upper surface of which is slightly inclined and furrowed with channels an inch deep uniting in a common centre at the lower angle. The basket is lined with a bag of coarse cloth, the end of which turns back and hangs down. Into this bag I put the deposit and scum; then drawing the edges of it together, I tie the mouth closely with a packthread. I place on the top a wooden trencher of the diameter of the inside of a basket. This I load with several square pieces of wood, which project over the upper part and serve as a fulcrum for the lever. When things are thus far arranged, I proceed to adjust the lever, which is five feet long. This is fixed at one end to a ring bolt, which passes through a stone. The other end I load with weights to the amount of from 56 to 112 pounds, increasing them at pleasure so as to produce a gradual and constantly increasing pressure, which may be rendered as

powerful as is necessary. The juice which is thus forced out, flows into a bucket and is thrown into the evaporating vessel.

The most difficult operation to be performed, is that of purifying the juice; and if this be not thoroughly done, the processes of evaporation and graining are long and troublesome: the juice swells and bubbles up in the boiler, and the sugar crystallizes imperfectly and remains mixed with molasses. The lime which is thrown in to clarify the juice, does not always rise to the top with the scum, by a prolonged period of rest in the deputy boiler, neither is it always precipitated. It sometimes happens, that notwithstanding all the care that can be taken, the liquor remains cloudy; and in such cases it is always in vain to look for good results. I have endeavored to ascertain the cause of these accidents, and I have sought to remedy the evil. I shall report here only what appears to me to be fully established by experiment and observation.

The juice does not purify well if the beets have begun to germinate too strongly, or if they have begun to decay, or have been frozen.

When the operations of the rasps and presses are conducted too slowly, so that the juice stands five or six hours before being purified, decomposition commences, and good results are never obtained.

If all the utensils employed are not carefully washed after each operation, so as to free them thoroughly from the juice adhering to them, the labor becomes difficult and unsuccessful.

I found, upon one occasion, that beets which had been kept in a cellar, where they had neither frozen nor germinated, did not, when subjected to experiment in March, yield sugar. They appeared perfectly healthy, though a little softer than those that had been kept in barns.

If the first operations are not well conducted the results are always bad. I can only point out the steps that can be taken to prevent this.

Beets, that have been well kept, may be worked with equal good success from the beginning of October to the end of March.

When the juice does not become clear, a small quantity of sulphuric acid may be thrown into the evaporating vessel, a little before the liquor begins to boil. This will remedy any trouble arising from the use of too large a quantity of lime. It will however, be useless, if the faults proceed from an altered state of the beet juice.

By making use of a portion of animal charcoal to clarify the liquor, the evaporation of the juice and the graining of the sugar is sure to be rendered more easy; but the quantity of sugar obtained is very small.

The lime used in the process of purification combines with the mucilaginous principle of the beets, and neutralizes the malic acid contained in them; after this operation, the juice weighs 1° or 1-5° less than before.

[(To be continued.)]

#### *A hint to Farmers—Value of Apples.*

J. Buel.—In the fall of 1835, I gathered about 150 bushels of good sound apples, of different kinds, and put them into my cellar, for the purpose of feeding them to my stock of cat-

tle and pigs, to see what effect they would have. When hard weather commenced, I had two cows that gave milk; I put them into a stable, and commenced feeding the two cows with half a bushel of apples to each cow per day. I charged the boy that milked them, to see if the cows increased in their milk, and the third day the boy says that the cows gave almost double the quantity that they did before I fed them with the apples, and the young woman that had the charge of the milk, says that the butter that was made from the milk of those cows at the time of feeding them with apples, was of a fine flavor, and a fine yellow color.

I likewise commenced feeding them to my pigs; I fed about one bushel a day to thirteen pigs, with a small portion of corn, and I now defy the state to bring thirteen as good pigs as mine, that has had no better keeping.

I had gathered about two hundred and fifty bushels of good sound apples, and put them into a good bin in my carriage house, with the intent of making them into cider; but before I got ready to make them into cider, the cold weather came on, and my apples froze. I immediately covered them with blankets, and they remained in that situation till the thaw, in the latter part of December; I then commenced feeding them to my stock of cattle, which consisted of 22 head and two colts, I fed them about ten bushels per day; I soon found that my cattle would not eat half the quantity of hay that they did before I commenced feeding them with apples, and when the apples were gone, I could see that my cattle had gained in flesh and looked better. I think that my apples that I have fed out to my stock of cattle this winter, has been to me more worth than though I had made them into cider and sold it for one dollar per barrel.

This from yours, &c. ELEAZER CADY.

Canaan, Feb. 16, 1836.

*Note.* A gentleman of Montgomery, informs us that he has derived like benefits from storing his apples, and feeding them in winter, to his stock; and that a horse which had for a long time been afflicted with the *heaves*, and to cure which, every previous prescription had failed, has been restored to entire health by this apple diet.

Correspondence of the Journal of Commerce.

SMITHFIELD, Isle of Wight Co. (Va.) }  
July 28, 1836. }

Sir—I observed in the Mercury of the 21st inst., (a weekly paper from the office of the Journal of Commerce) an editorial article on the subject of Hydrophobia, wherein it was stated that several persons in your city had been bitten by dogs supposed to be laboring under that disease. Believing it to be the duty of every man, who possesses information calculated to benefit his fellow beings, to communicate it, I take the liberty of addressing you, to inform you of a prophylactic remedy for hydrophobia, in which I am induced to place some confidence. The fear of being charged with quackery has prevented the medical gentleman, in whose practice it has been most successfully used, and from whom I obtained the information which I now make known to you, from publishing it through the papers for



the good of mankind; but as the city of New-York appears to have been visited this summer by many rabid animals, and many of the citizens have been bitten by them, I conceive it to be my imperious duty to my fellow creatures to use any means in my power, calculated to alleviate their sufferings. The remedy has been administered to 8 of the human species who had been bitten by dogs, undeniably mad, and in a majority of those cases many years have elapsed, but not one has been affected with the least symptom of the disease. Many dogs have also been treated with the same remedy, and none of them were subsequently affected. It is well known to physicians that a large majority of the persons who are bitten by mad dogs, never have the disease unless they receive the bite on a naked part of the body: but under this last circumstance very few escape. Now the persons who have been treated with this remedy, were all of them bitten on the naked hands, arms or legs, which causes me to rely on its efficacy as a preventive more strongly than if the parts had been covered; whereby the animal's teeth might have been cleansed of the saliva before they entered the flesh.

The following is the receipt and mode of administering it. You will perceive it is composed of vegetables common in every part of our country, and so perfectly harmless in themselves, that it cannot possibly prove injurious to the system.

Take of the fresh leaves of the Tree-box, 2 oz.  
of the fresh leaves of Rue, 2 oz.  
of Sage, 1 oz.

Chop these fine, and boil in a pint of water to half a pint, strain carefully, and press out the liquor very firmly; put back the ingredients into a pint of milk, and boil again to half a pint; strain as before, mix both liquors; of which give one-third part, each subsequent morning fasting. As it possesses no power to relieve the disease itself, but is given merely as a preventive, any time between the reception of the bite and the first appearance of the symptoms is the proper period of administering it.

Your's respectfully,

JOHN R. PURDIE, M. D.

Dr. P. requests us not to publish his name unless "urgently required." We suppose the urgency exists; for the public pay little regard to publications on such subjects, not accompanied with a name. Eds. J. of C.

From late Foreign Journals received at the office of the National Gazette.

#### APPLICATION OF STEAM TO AGRICULTURE.

To the editor of the London Morning Chronicle.

Sir—Some incorrect statements having appeared in several provincial papers, relative to a recent exhibition near Bolton-le-Moors, of the application of steam to bog cultivation, as invented by Mr. Heathcoat, I should feel obliged by the insertion of the accompanying remarks, on the part of myself and those gentlemen who accompanied me to witness this interesting experiment.

I am, sir, your obedient servant,

26, Pall Mall, June 13th. H. HANDLY.

#### STEAM PLOUGHS.

The adaptation of inanimate power to the tillage of the soil, must evidently have been considered by practical men to present insuperable difficulties, or steam would, probably, long since have been substituted for horses and oxen, as the motive power of agricultural implements. Certain light operations of the farm, such as thrashing, churning, chaff-cutting, &c., which could be performed by fixed power, have partially occupied the attention of mechanics, and suitable machinery driven by water, wind, or small steam engines, has to some extent been advantageously used for such purposes. But the idea of a "steam farm," of a farm to be altogether cultivated by steam, in lieu of animal power, has hitherto been treated as visionary and absurd, except by a few individuals, and one or two agricultural societies, who have enforced in their publications, the practicability and importance of applying steam to effect the more laborious operations of agriculture.

This desideratum is at length accomplished. Mr. Heathcoat, M. P. for Tiverton, the ingenious and well known inventor of the lace machinery, has the merit of having conceived and planned this additional and remarkable contribution to science, and to the wealth of his country. The invention after years of costly experiment, has been matured and perfected through the enterprising liberality of Mr. Heathcoat, assisted by the mechanical ingenuity and perseverance of Mr. J. Parkes, civil engineer, whom he selected to carry his designs into effect. The first machine has been constructed expressly for the cultivation of bogs, and has, for some months, been practically and successfully worked in Lancashire, on Red Moss, near Bolton-le Moors.

During the Whitsuntide recess of Parliament, a numerous assemblage of gentlemen from different parts of the country attended to witness an exhibition of this novel and interesting invention; amongst whom were Mr. L. Chapman, M. P., Mr. T. Chapman, Mr. H. Handly M. P., Mr. J. Featherstone, of Griffinstown-house, Westmeath (an enterprising and successful bog-reclaimer), Mr. F. Brown, of Welbourn, Lincolnshire, Mr. James Smith, of Deanston, near Stirling, (well known to the mechanical world by his ingenious inventions, applied both to agriculture and manufactures), Mr. B. Hick and Mr. P. Rothwell, experienced judges of mechanical contrivances. These gentlemen were unanimous in pronouncing the invention to be the germ of great improvements in the science and practice of agriculture, as well as eminently fitted for the particular purpose to which it has, in the first instance been applied. Two ploughs of different construction were put in action, to the admiration of the spectators; particularly the one last invented, which is double-acting, or made with two shares in the same plain, so that it returns at the end of a "bout," taking a new furrow, without loss of time. The perfect mechanism of this plough—the action of the working coulters and under-cutting knives, which divide every opposing fibre of the moss—the breadth and depth of the furrow turned over—the application of a new and admirable means of traction, instead of chains or ropes—together with the facility with which the machine is managed, and the power applied to the

plough, especially interested and surprised all present. The speed at which the plough travelled was  $2\frac{1}{2}$  miles per hour, turning furrows 18 inches broad by 9 inches in depth, and completely reversing the surface. Each furrow of 220 yards in length was performed in somewhat less than three minutes, so that in working a day of twelve hours, this single machine would with two ploughs turn over ten acres of bog land!

The machine which bears the steam-engines is itself locomotive; but as the ploughs are moved at right angles to its line of progress, not dragged after it, the machine has to advance only the width of a furrow, viz.: eighteen inches, whilst the ploughs have travelled a quarter of a mile; in other words, the machine has to be moved only eleven yards, in the time that the ploughs have travelled  $5\frac{1}{2}$  miles, and turned over a statute acre of land. This is, in truth, the prime distinguishing feature of the invention; it is the contrivance on which the genius of its author is more particularly stamped, and which seems to be essential to the economical application of steam to husbandry; for it is evident, that were it requisite to impel the machine with a velocity equal to that of the ploughs, by dragging them with it, a great portion of the power of the engines would be uselessly expended.

Another valuable property appertaining to the machine, and which conduces greatly to its economy as a bog cultivator is, that it requires no previous outlay in the formation of roads, no preparation of any kind further than a drain on each side of it. That locomotive machine of such great dimensions and power could be so constructed as to travel on mere raw bog, was an excellence the more appreciated as it was unexpected by those persons who are conversant with the soft, unstable nature of bog. The Irish gentlemen present also pronounced Red Moss to be a fair specimen of the great mass of the flat, red, fibrous bogs of Ireland, and that neither the machine nor the ploughs would have any difficulties to encounter in that country which had not been already overcome on Red Moss, the field of experiment. The engines are capable of working up to 50 horse power, but the operations subsequent to ploughing will require a small force compared with that necessary for breaking up the surface of the bogs, to the depth and at the speed effected by these ploughs. The power consumed by each plough is estimated at about 12 horses, and the weight of the sod operated upon by the plough, from point to heel, is not less than 300 pounds. The boiler is of unusually large dimensions for locomotive engines, being suited to the use of peat as fuel, so that the culture of a bog will be effected by the produce of its drains. At Red Moss, however, coals are so cheap, being found contiguous to and even under it, that they are used in reference to turf. Eight men are required for the management of the machine and the two ploughs, or at the rate, nearly, of one man per acre; but it must be understood that this number of men will only be required for the first heavy process, and has no relation to any subsequent operations in the cultivation of bogs, nor to the application of the invention to the culture of hard land.

After passing a sufficient time on the Moss to witness the exhibition of the ploughs, and the

various other functions and properties of the machine, the party expressed to Mr. Heathcoat the extreme pleasure they had received, and their earnest hope that he would extend the sphere of his exertions by applying the invention to the culture of stiff clay soils; and more especially to carry into effect those important operations of sub-soil ploughing and improved drainage recently introduced to the agricultural world by Mr. Smith, of Deanston. To effect these processes, great power is essential, and it was evident that Mr. Heathcoat's invention was equally well adapted to them, and would be attended with results no less important than those which will arise from its application to the reclamation and culture of bogs.

LETTER FROM A FATHER, LIVING IN THE STATE OF NEW YORK, TO HIS SON IN WESTERN PENNSYLVANIA.

### ON KEEPING HOGS & FATTENING PORK.

To my Son—Another branch of stock husbandry interesting to farmers, and to many who are not farmers, remains to be considered. I am now speaking of the husbandry of hogs, and fattening pork. Almost every family, especially if located in the country, should fatten every year at least one good hog. This is necessary to prevent the waste of many articles which must be cast out, and will otherwise be lost. To farmers, the fattening of pork is often a lucrative branch of their husbandry, and it might become, to many of them at least, far more so than it is, if they would learn how to conduct it in better accordance with the principles of economy. A few suggestions to aid your improvement in this important branch of husbandry, will constitute the subject of this letter.

The husbandman or householder who undertakes to fatten pork, should in the first place, be careful to procure a good breed of hogs. This is very important, far more so than seems to be generally understood. It is a fact well ascertained, that there are, among different breeds of hogs, very great differences as to their propensities, or lack of propensities, to thrive and fatten. Some are voracious eaters, and yet slow to acquire flesh; while others require but little food to keep them in a thrifty condition, and possess withal remarkable propensities to fatten. Those who best understand the subject, are not of the opinion that large boned hogs, or hogs that are capable of attaining to the greatest bodily stature, are, in general, the most profitable. Unquestionably the most profitable hogs are such as are capable of attaining to the greatest bodily stature, are, in general, the most profitable. Unquestionably the most profitable hogs are such as are capable of making the greatest amount of good pork at the least expense. These it is said are not found among hogs of gigantic stature, but are to be looked for rather among the smaller breeds.

There are now in the country several breeds of hogs, known by their distinctive names, and all recommended by their respective friends, as breeds of superior excellence. Among these are the China breed, the Byfield, the Berkshire, the Bedford, and some others. I know not their comparative merits. It may not be easy for you

to obtain any of them in their purity, but in different degrees of intermixture the most of them are to be found in nearly all parts of the country. It is not so much my object to put you on pursuit of any particular breed of hogs, as to impress on your mind the importance of seeking after and obtaining a good breed. This, it is believed, you can do, without travelling far in pursuit of your object. For further illustrations of the subject on which I am now writing, I refer you to the chapter on Swine, published in the *Genesee Farmer*, current volume, No. 1, over the signature of Ulmus. The gentleman who wrote the chapter referred to, is master of the subject on which he wrote, and his opinions are entitled to great respect.

To the householder who intends to fatten pork it is a matter of some importance to know, whether hogs that have been kept over the winter, or spring pigs, are the most profitable for that use. When it is intended to fatten pork on a small scale, in connection only with one, two or three hogs, it is, in general, the better way to depend for that purpose entirely on spring pigs, and thus save the expense and trouble incident to keeping hogs through the winter. Pigs that come in March or early in April, can, if they are of good breed, easily be made to weigh, at the proper season for butchering, 200 weight or more, after they are dressed. If taken proper care of, they will do this on an average. The pork thus obtained will, in general, have cost less than such as has been made of hogs that have been kept over the winter. As hogs do not, in general, thrive well, in the winter; as their keeping at that season is peculiarly expensive; and as they are rarely found in the spring to be much in advance of what they were in the fall, it is worthy of consideration whether it would not be better to depend for making pork chiefly on spring pigs. I propose this as a question, not meaning to be considered as answering it in the affirmative.

All preliminary questions being settled, and possession gained of a good breed of hogs, the next care of the husbandman should be, to make himself acquainted with the best methods of feeding them, and to practice accordingly. To afford them in every stage of their existence, plentiful supplies of food, at least sufficient supplies to keep them, all the while, in a thrifty and growing condition, is an indispensable requisite. A poor hog, whose carcass is composed of little else than skin and bones, is a sight dismal to behold, and whenever such a wretched animal is seen, he bears disgraceful testimony against the wisdom, the economy, and almost the moral rectitude of his proprietor. No one should undertake to keep more hogs than his means of keeping will enable him to keep, at all times, in perfectly good order. Keeping too many hogs is a very common error, and it prevails most among the poorer classes of community. It is not so well understood as it should be, that the economy of making pork consists much in making a large quantity from a small number of hogs. The sentiment which I wish to express is, that any given quantity of pork, made of hogs weighing severally when dried, 300 weight or more, comes to the proprietor at less expense, and yields him a greater profit than the same quantity would if made of lighter hogs. It is supposed the two

classes of hogs here spoken of are of the same age, and that the difference in their produce is the result either of different treatment, or a difference in the quality of their breeds. The doctrine which I desire to inculcate on you is, not to multiply hogs; but when you have set your aim at any given quantity of pork, which in your judgment is needful to be produced, employ for its attainment only the smallest number of hogs, from which it will be practicable to produce the desired quantity. If hogs that have been kept over the winter are selected for fattening, the produce of each hog in pork should not be less than 300 weight.

It has been said, hogs require plentiful feeding. As they have voracious appetites, and are not at all difficult in the choice of what they eat, their food may be drawn almost indiscriminately out of nature's vast store house. They will eat, with greediness, every kind of flesh, and there are not many vegetable productions from which a hungry hog will turn away. In the summer season scarcely any thing accommodates hogs to better advantage than a fresh clover pasture. In such a pasture they will, although no other food be given them, thrive, and make considerable acquisitions of flesh. Of the various sorts of swill commonly made use of as food for hogs, nothing need be said, except that swill of every kind is the better for having become a little sour. Care however should be taken, while aiming at this object, not to let it sour so much as to become putrid. Almost all sorts of fruit, such as peaches, plums, and especially apples, are palatable and nutritious to hogs. So too are potatoes, and all the other roots that have been enumerated in any of my preceding letters. Most of the articles here mentioned, will be useful to hogs in some degree, although given to them without cooking, but it is now well understood that almost every substance made use of as food for hogs, is susceptible of great improvement, by being boiled or steamed. That such is the fact, I am satisfied from my own experience. I have boiled old corn for hogs, and the results were such as satisfied me, that my labor had been exceedingly well applied. Cooking corn, as any other grain, fits it for the use of hogs in all respects as well as it can be fitted by grinding, or any other process. Is it not better then to cook it, and thus save the miller's toll, together with the expense and trouble incident to carrying to mill, and getting it back?

I am now ready to offer a remark which I consider as worthy of more than ordinary regard. The remark is, that at every domestic establishment, where it is intended to fatten pork, there should be provided a suitable apparatus for cooking food for hogs. This apparatus should consist of a kettle or caldron, that may cost from 5 to 7 dollars, suitably set in mason work, and inclosed with a small building, or at least covered with some sort of roof to shelter it from the storms. Such an establishment, even when pork is fattened only on a small scale, would quickly remunerate its expense in preparing food for hogs, besides being very useful for many other purposes. Here corn, or any other grain, may, with little expense, be boiled or steamed, and thus rendered far more nutritive to hogs than it will be without cooking. Here too, apples, potatoes,



pumpkins, and almost countless other vegetables, may be cooked in such a manner as to become wholesome and nutritious food for hogs.

Fattening hogs altogether upon corn, as was formerly the general practice, is now considered as too expensive to admit of justification on the principles of economy. It is a good practice to commence fattening hogs on peas. But when peas are not provided, potatoes may be used in the first stages of fattening to great advantage. These, however, more than almost any thing else, require cooking to fit them for use. It has lately been discovered, that hogs fatten well upon apples, as well, we are told, as any other food whatever. Sweet apples are supposed to be the best, but it is said any sort of apples, if cooked, answer a good purpose for fattening pork.

A FATHER.

New York state, March, 1836.

**Agriculture—Our Soil.**—Several stalks of Timothy may be seen at this office, which measures upwards of five feet in height, and the heads upwards of nine inches in length. This Timothy grew in a lot of 4 acres in Port Carbon, which was fenced in last year, and which had received no manure, except 150 bushels of lime ashes. The four acres produced about seven tons of hay, and the average height of the Timothy was about four feet and a half.

We have also been presented with several stalks of Timothy, one of which is five feet and a half high, which grew on Mr. BENJAMIN POTTS' farm, near this borough. Three years ago, Mr. P. purchased the property in which he now resides; it then produced three tons of hay. The present season he has procured upwards of one hundred and twenty-five tons off the same farm, one hundred of which he will sell, and can very readily procure \$20 per ton, for in the Pottsville market. Such are the fruits of the cultivation of our soil, and we know of no place which bids so fair to reward the agriculturist for his toils, than this region. We have a large body of land lying in the immediate vicinity of our borough, that might be cultivated to advantage—and we respectfully invite the attention of our agriculturists to the subject.—*Miner's Pottsville Jour.*

LEAD MINES IN ST. LAWRENCE COUNTY, N. Y.

The Montreal Gazette of 20th ult. gives these particulars of the late and valuable discoveries of lead near Ogdensburg:

Nothing has been talked of in Ogdensburg and its neighborhood for some months past but the great lead mines discovered in the course of last winter. The value of the stock has increased in the most rapid manner, as the following short history will show. Mr. T. Nash, who was the first person to find and trace out the course of the metal, succeeded in obtaining from the proprietor of the ground where it lies, a lease for ten years, for the first 5 years of which no rent is paid, and for the last 5 the trifling sum of 3s. 9d. Halifax currency, per ton of ore actually excavated. Being unable to work the mine himself, Mr. Nash sold a great portion of his interest in it, for sums varying from \$2000 and upwards per sixteenth share. He now only retains three sixteenths, which are valued at \$5,000 each. A sale of one sixteenth

belonging to another proprietor, was effected at that sum on Thursday last. The lease itself, which commences 1st of January next, is valued at \$400,000. Rapid as has been the rise in the price of shares, several of the principal merchants in Ogdensburg think they are still much under their real value. During the present season, and until the lease commences, the proprietor only permits the leaseholders to excavate 500 tons of ore. About 200 tons have been already obtained and sent to New York, where, upon analysis by the most experienced chemists, it was found to contain as nearly as possible 85 per cent of pure metal. The cost of excavation and transport to market is about \$15 per ton, and the price obtained \$70, equal to 333 1-3 per cent. The place where the metal is found is situated thirty miles from Ogdensburg, in a rugged and broken country running East and West; the veins are lodged perpendicularly in granite rock, are about 2 feet thick near the surface, but increase in width as they descend. They are supposed to be of great extent. In the neighborhood small quantities of silver have been obtained, and iron is very plentiful.

When the proprietor entered into the lease, he was of course entirely ignorant of the value of the mines.

**Singular Casualty.**—A correspondent at Tazewell, communicates to us the following extraordinary and distressing intelligence. While Mr. William Walker, at Speedwell, Claiborne county, an elderly gentleman was making a fence, he discovered a large spider which he killed with a stone. In afterwards prosecuting his work he had occasion to handle the same stone. A mortification shortly afterwards commenced in his hand and increased until it produced his death in 8 or 10 days. At the time he handled the stone, he had a slight sore on his hand in which the mortification afterwards commenced, which was supposed to have come in contact with some poisonous matter from the spider left on the stone. Dr. William Rogers who attended Mr. Walker, and who also had a sore finger, died with a mortification, in four days after it was first discovered that his finger was affected. Our correspondent further informs us that a number of those who assisted in laying out Mr. Walker have been seriously afflicted—some are now very low, but only the two deaths above mentioned had taken place.—*Knoxville Register.*

**BERKS COUNTY SILK.**—We have recently examined a specimen of *Sewing Silk*, the first ever manufactured in this county, and it was of such a quality, and the manner of its production so creditable, that it did our hearts good. It was the entire production of a young lady near Reading, one of Berks county's fairest daughters, who reared and fed the worms, spun the silk from the cocoons, and doubled and twisted it into skeins, all with her own hands. Here now is the example set to our young ladies, and we are persuaded they are about to imitate it, as a large quantity of mulberry seed has gone into different parts of the county from this place. How irresistible would be the charms of the young lady, when dressed in the fabric of her own hands' produc-

tion, and how eagerly would the beaux press forward for her hand!—And well might they seek such wives, for they would be worth having.—*Reading Press.*

#### PLOUGHING IN A GREEN CROP.

As winter evenings seem to afford a suitable opportunity for intellectual improvement, and considering that the pages of a periodical of this kind are dependent very much on correspondents for matters of information, and that it is the part of every subscriber to contribute his mite to the improvement and information of the readers of an agricultural work of this nature, I have ventured to pen a few of my thoughts.

The farmers of almost every section of country differ materially in their modes of farming, and opinion respecting the most profitable manner of converting the produce of their farms into money. Their difference of opinion is certainly allowable and natural, when we take into consideration the difference of soils, the distance from markets, the difficulty in most neighborhoods of obtaining proper help, &c. all of which the farmer has to accommodate himself to in the best manner he can. The business of a farmer, is, in my opinion, an independent, an honorable, and, when properly pursued, a profitable one; and no doubt, so long as our country continues in prosperity, the increasing demand for produce will insure to the farmer a handsome remuneration for the products of his soil.

Ploughing in of green crops, as practised in the State of New York, is so economical a mode of enriching the soil, that I have often marvelled it is not practised to a much greater extent in other places. Allow me to recommend the spreading of a coat of lime previous to ploughing in.

If the slovenly farmer, who allows his weeds to grow up unmolested and cover his fields, would, instead of this, plough them under, after a few repetitions of this, he would be surprized at the increased fertility of the soil, and save the labour of carting manure from a distance.

With respect to the best crops for turning under there are various opinions; rye and red clover are, perhaps, as much in use as any other, though some plough in oats, millet, turnips, &c. In dry situations this practice succeeds best, as by the ground remaining exposed to wet, the crop turned under would not be so likely to rot.—*N. Y. Farmer.*

#### THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

## BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel.	1 75	—
CATTLE, on the hoof,.....	100lbs.	7 00	8 50
CORN, yellow,.....	bushel.	86	88
White,.....	"	80	83
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	"	—	—
Upland,.....	"	18 1/2	20
Louisiana 19—Alabama	"	18	20
FEATHERS,.....	pound.	50	52
FLAXSEED,.....	bushel.	1 50	—
Flour & Meal—Best wh. wh't fam.	barrel.	9 00	9 50
Do. do. baker's,.....	"	—	—
Do. do. Superfine,.....	"	7 75	8 00
SuperHow. st. in good de'd	"	7 75	7 87
" wagon price,.....	"	7 50	7 62
City Mills, extra,.....	"	—	8 00
Do. ....	"	—	7 87
Susquehanna,.....	"	7 75	8 00
Rye,.....	"	5 25	—
Kiln-dried Meal, in hhd. hhd.	"	—	19 00
do. in bbls. bbl.	"	4 00	4 12
GRASS SEED, red Clover,.....	bushel.	5 00	5 50
Timothy (herds of the north)	"	3 00	3 50
Orchard,.....	"	—	2 50a3
Tall meadow Oat,.....	"	2 25	2 60
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	20 00
Hemp, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 75	8 25
Slaughtered,.....	"	—	—
Hops—first sort,.....	pound.	16	—
second,.....	"	14	—
refuse,.....	"	12	—
LIME,.....	bushel.	35	37
MUSTARD SEED, Domestic,.....	"	—	—
OATS,.....	"	35	37
PRAS, red eye,.....	bushel.	—	—
Black eye,.....	"	1 12	—
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 25
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	106	112
Susquehanna,.....	"	—	—
Tobacco, crop, common,.....	100lbs	4 50	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 00	5 00
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 80	—
Red,.....	"	1 25	1 75
WHISKEY, 1st pf. in bbls. ....	gallon.	38	39
" in hhd. ....	"	35	—
" wagon price,.....	"	31	—
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 25	—
To Wheeling,.....	"	1 50	—
WOOL, Prime & Saxon Fleeces,.....	pound.	55 to 68	30 32
Full Merino,.....	"	48	55 28 30
Three fourths Merino,.....	"	45	48 26 28
One half do,.....	"	40	45 26 28
Common & one fourth Meri.	"	36	40 26 28
Pulled,.....	"	38	40 26 28

## A DURHAM BULL FOR SALE.

THE Editor of the Farmer and Gardener has for sale at his residence about two miles from Baltimore on the Philadelphia Turnpike road, a white bull with red spots about the head and neck. He is full blooded and of the improved short horn breed; has given many living evidences of his capacity for service, his calves being large and of the most superior points. His price is \$300.

jy 11

## BALTIMORE PROVISION MARKET.

	PER	FROM	TO
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	16	17
Shoulders,..... do.....	"	12	—
Middlings,..... do.....	"	13	13 1/2
Assorted, country,.....	"	11	—
BUTTER, printed, in lbs. & half lbs.	"	20	37
Roll,.....	"	20	25
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	4 50	6 00
Cows, new milch,.....	"	25 00	45 00
Dry,.....	"	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOP RYE,.....	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna, barrel.	10 00	—	—
No. 2,.....	"	9 50	—
Herrings, salted, No. 1,.....	"	3 50	3 62
Mackerel, No. 1, \$8.—No. 3	"	—	5 25
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	15	—

## BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....	par
Branch at Baltimore,.....	do
Other Branches,.....	do
MARYLAND.	
Banks in Baltimore,.....	par
Hagerstown,.....	do
Frederick,.....	do
Westminster,.....	do
Farmers' Bank of Mary'd, do	do
Do. payable at Easton,.....	do
Salisbury,..... 5 per ct. dis.	do
Cumberland,..... 1	do
Millington,.....	do
DISTRICT.	
Washington,.....	do
Georgetown,.....	do
Alexandria,.....	do
PENNSYLVANIA.	
Philadelphia,.....	do
Chambersburg,.....	do
Gettysburg,.....	do
Pittsburg,.....	do
York,.....	do
Other Pennsylvania Bks. 1 1/2	do
Delaware [under \$5]..... 3/4	do
Do. [over 5]..... 1/2	do
Michigan Banks,..... 5/8	do
Canadian do..... 5/8	do

## FARMER'S REPOSITORY.

No. 36 W. Pratt-street, Baltimore, Jan. 25.

THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present Improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size:—his prices for them being as follows, viz:

11 inch Revolving bottoms \$30, with extra pair of knives,	
11 " Permanent Bottom 28, do do do	\$33
13 " " " 43, do do do	31
13 " Revolving Bottom 45, do do do	48

15 " " " 50, do do do do  
20 " Large size fitted for horse-power 80, do do do

His variety of ploughs embraces almost every description and size that are worthy of notice, from a small hand plough to the large rail road Plough—Gideon Davis Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his premises, of the best stock and with special care; a supply of them always on hand to sell separate from the plough when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Norland's spring concave Thrashing Machines, large and small size, and portable horse powers for the latter; also one of Z. Roesch's 2 horse Thrashing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinning and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality; and all on reasonable terms, at wholesale and retail.

Likewise in store—Orchard Grass, Timothy, and Hawk Grass seed of superior quality.

JONATHAN S. EASTMAN.

## DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland, who thus speaks of its superior quality. "It was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white flat turnip. In fact it includes the great desideratum in the selection of a proper variety of the turnip, which is to obtain the greatest possible weight at a given expense of manure. This variety seems to be more adapted to this end than any other sort introduced. It will be found superior in quality to any of the white field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga; the color is yellow—the shape oblong." Price 25 cents per ounce. The season for sowing is at hand.

R. SINCLAIR, Jr.

July 5 2t

Light near Pratt st. wharf.

## OXEN WANTED.

THE Editor of the Farmer & Gardener, Baltimore, Md. wishes to purchase 4 pair of Eastern Oxen. It is necessary that they should be good matches, young, large sized, well broken, of docile disposition, and that the yoke in which they have been used to work should accompany each pair.

Farmers and others, to the eastward, possessing such animals will please make immediate application, stating the character, &c. of their respective oxen, price deliverable at Baltimore, and time when they can be delivered.

Editors to the eastward with whom we exchange will confer a favor which will be reciprocated by giving this a few insertions.

jy 19

## DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility, the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of 6 miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter, post paid, to the editor of the Farmer and Gardener.

jy 19

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